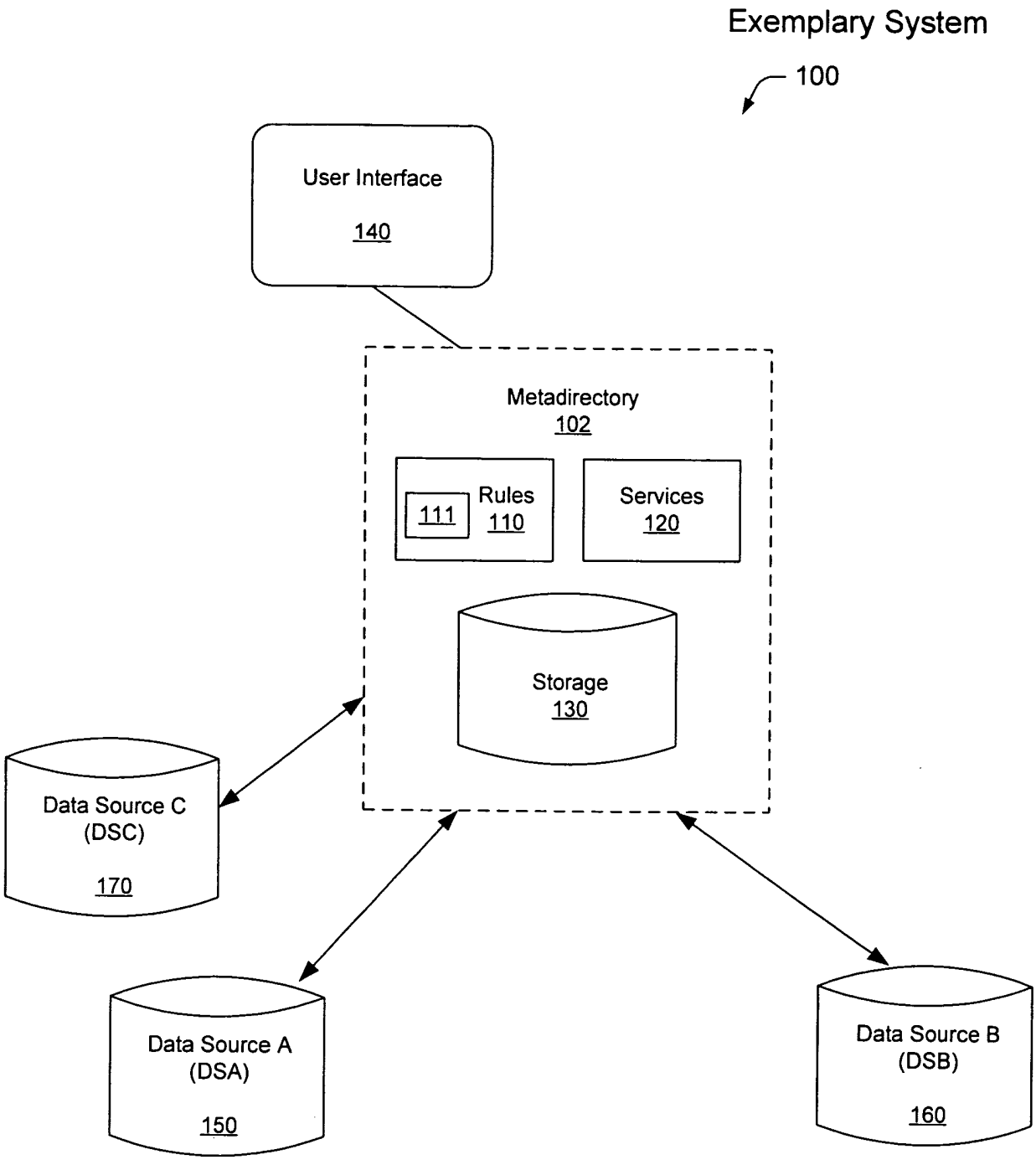
Exemplary System
100
User Interface
140
Metadirectory
102
111
Rules
110
Services
120
Storage
130
Data Source C
(DSC)
170
Data Source A
(DSA)
150
Data Source B
(DSB)
160

Fig. 1

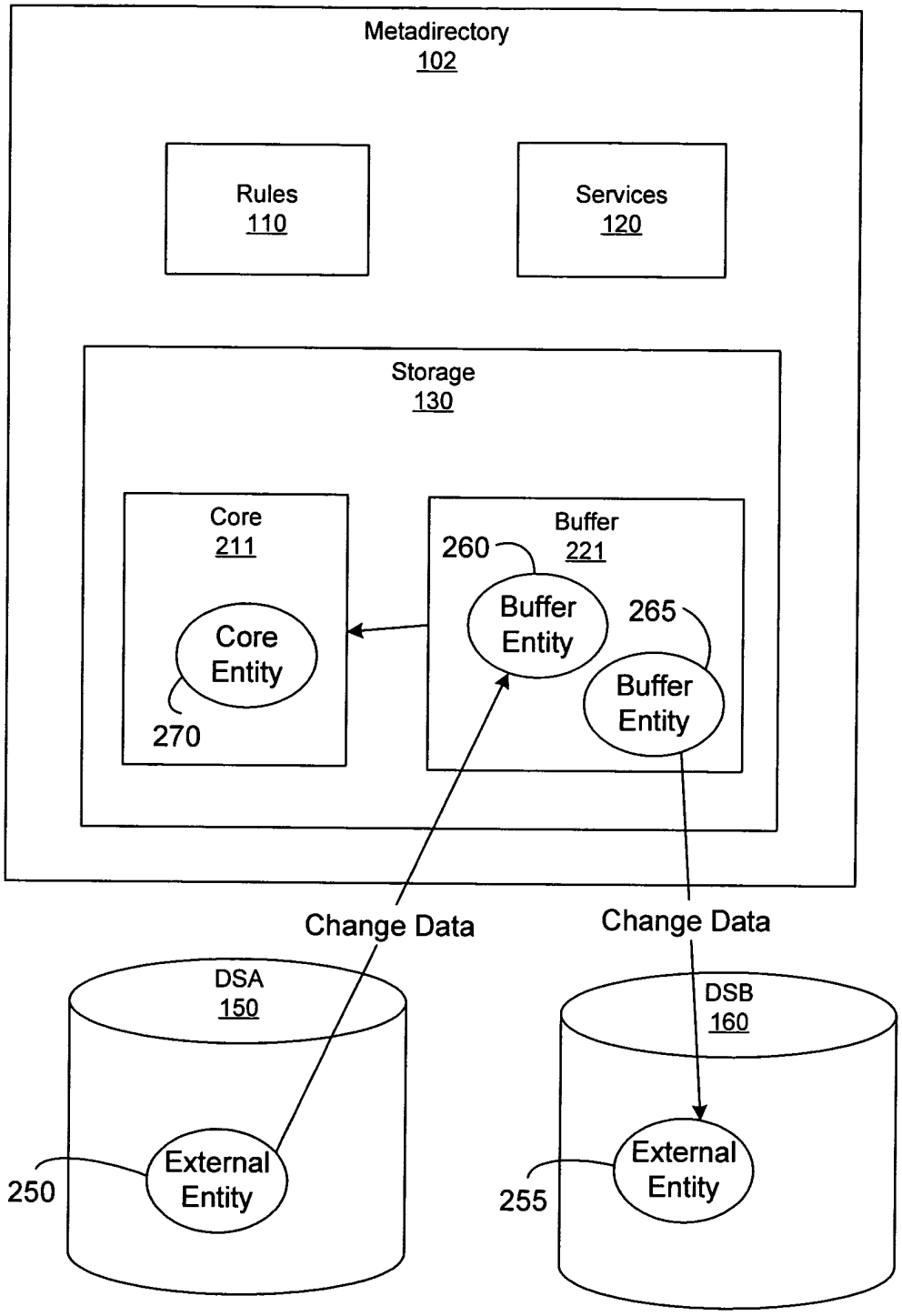
Metadirectory
102
Rules
110
Services
120
Storage
130
Core
211
Core Entity
270
Buffer
221
260
Buffer Entity
265
Buffer Entity
Change Data
Change Data
DSA
150
External Entity
250
DSB
160
External Entity
255

Fig. 2

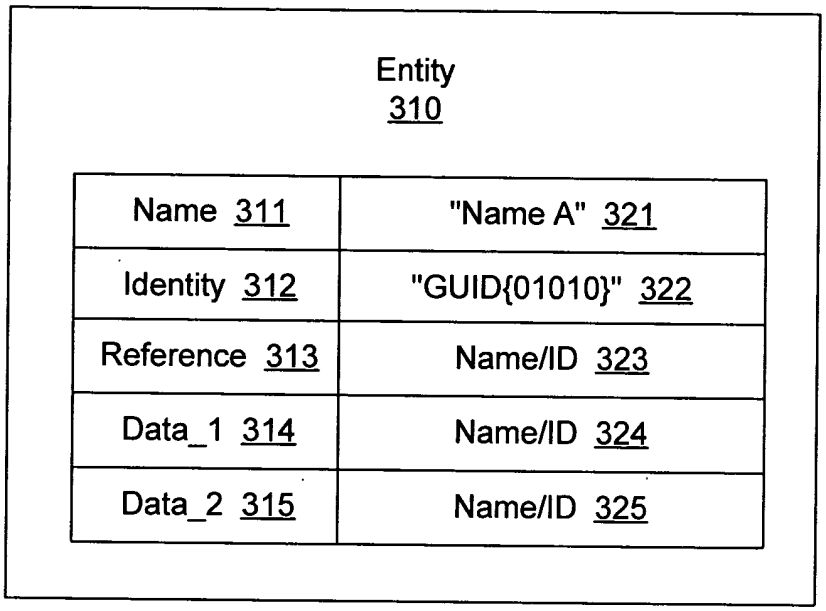
Entity
310
Name 311
"Name A" 321
Identity 312
"GUID{01010}" 322
Reference 313
Name/ID 323
Data_1 314
Name/ID 324
Data_2 315
Name/ID 325

Fig. 3

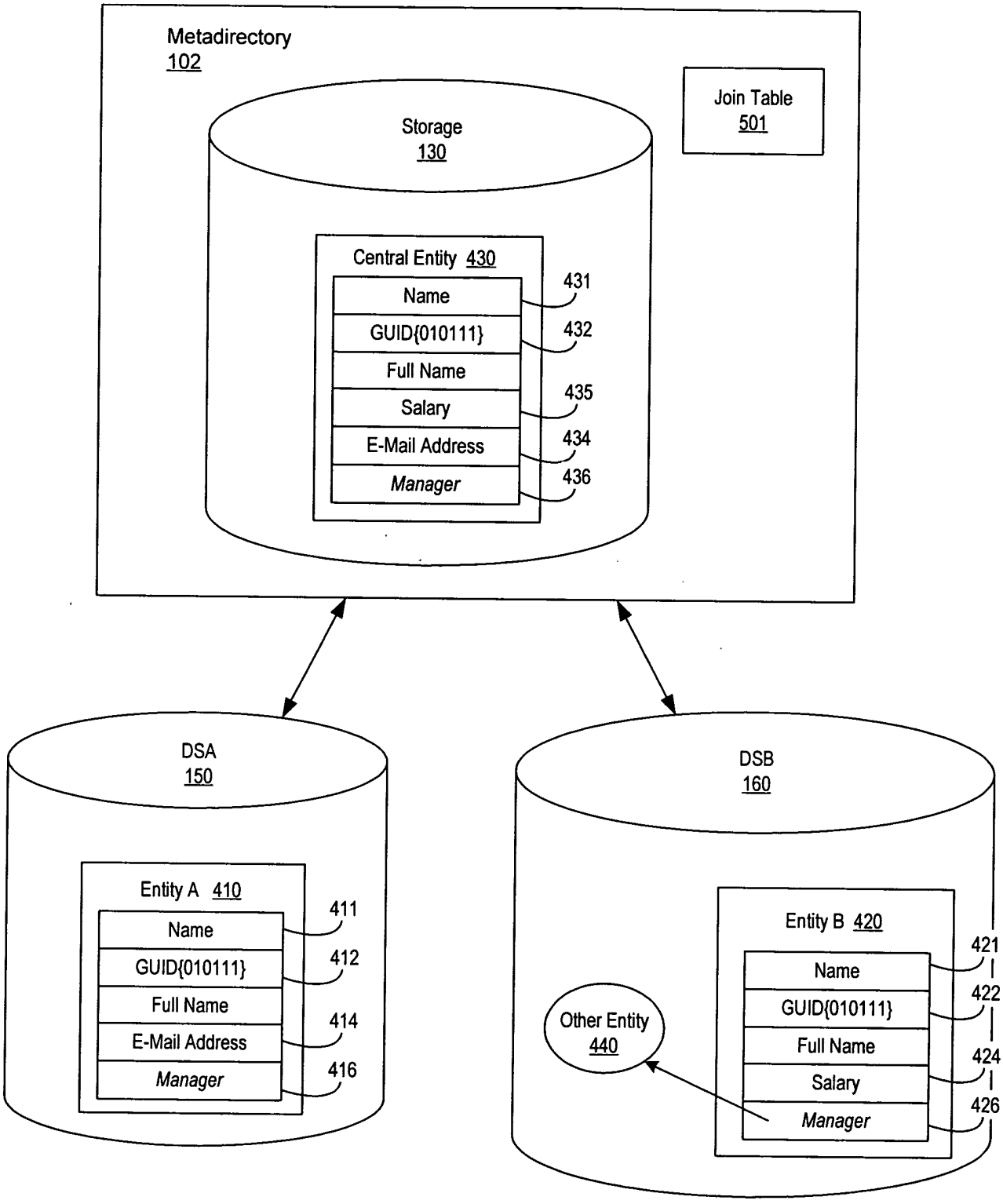
Metadirectory
102
Storage
130
Join Table
501
Central Entity 430
Name
GUID{010111}
Full Name
Salary
E-Mail Address
Manager
431
432
435
434
436
DSA
150
Entity A 410
Name
GUID{010111}
Full Name
E-Mail Address
Manager
411
412
414
416
DSB
160
Entity B 420
Name
GUID{010111}
Full Name
Salary
Manager
421
422
424
426
Other Entity
440

Fig. 4

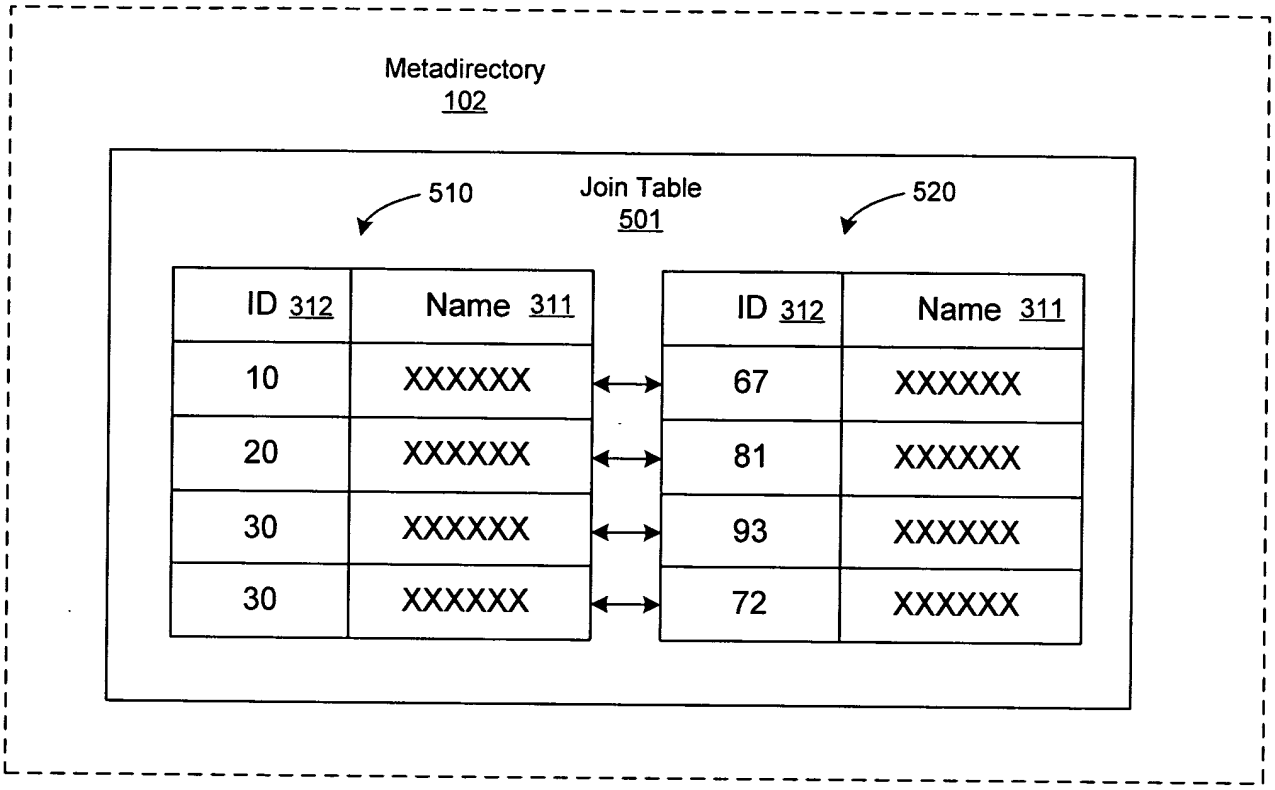
Metadirectory
102
510
Join Table
501
520
ID 312
Name 311
ID 312
Name 311
10
XXXXXX
67
XXXXXX
20
XXXXXX
81
XXXXXX
30
XXXXXX
93
XXXXXX
30
XXXXXX
72
XXXXXX

Fig. 5

Exemplary Screen Shot 600

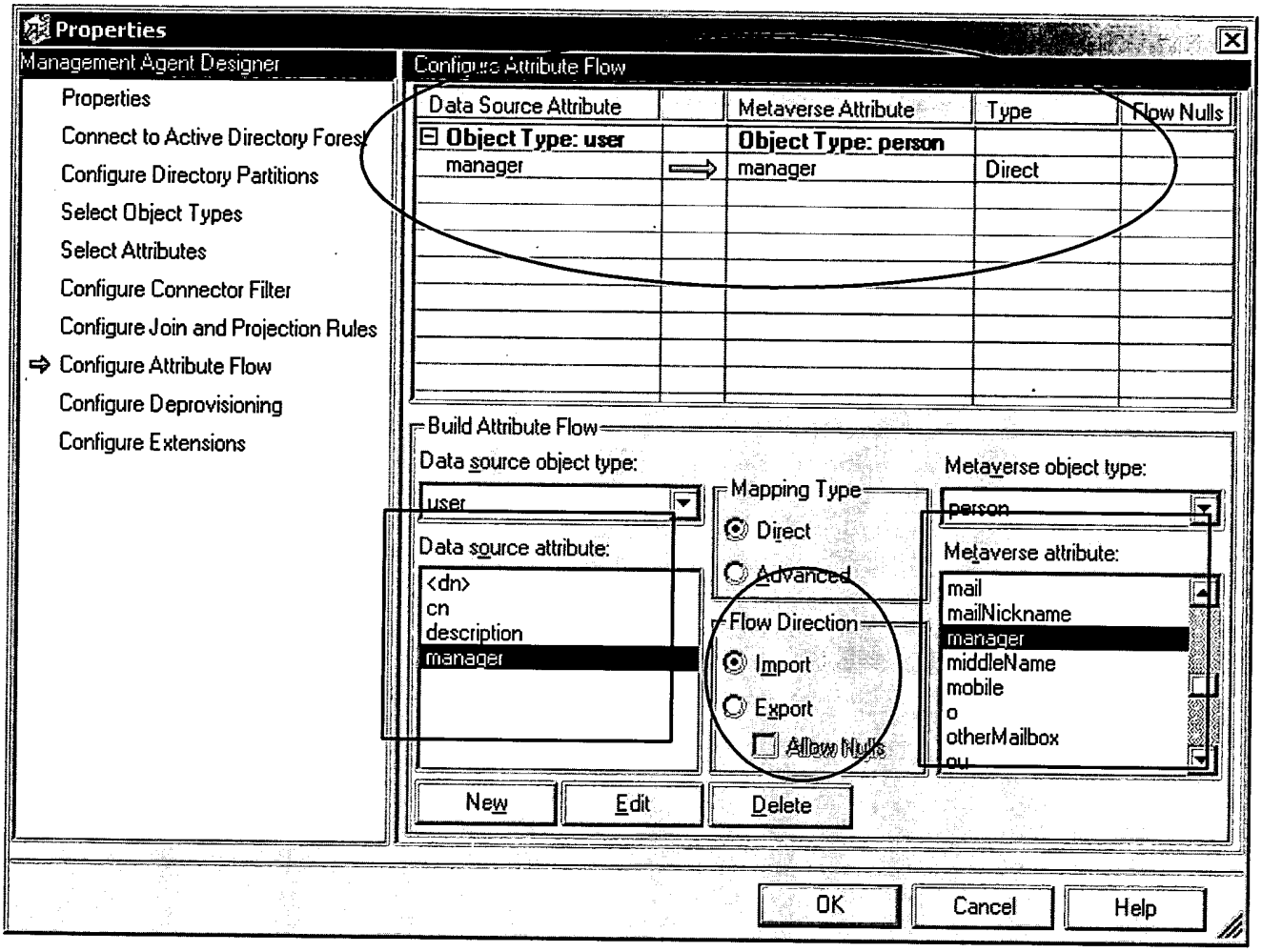

Fig. 6

Exemplary Screen Shot

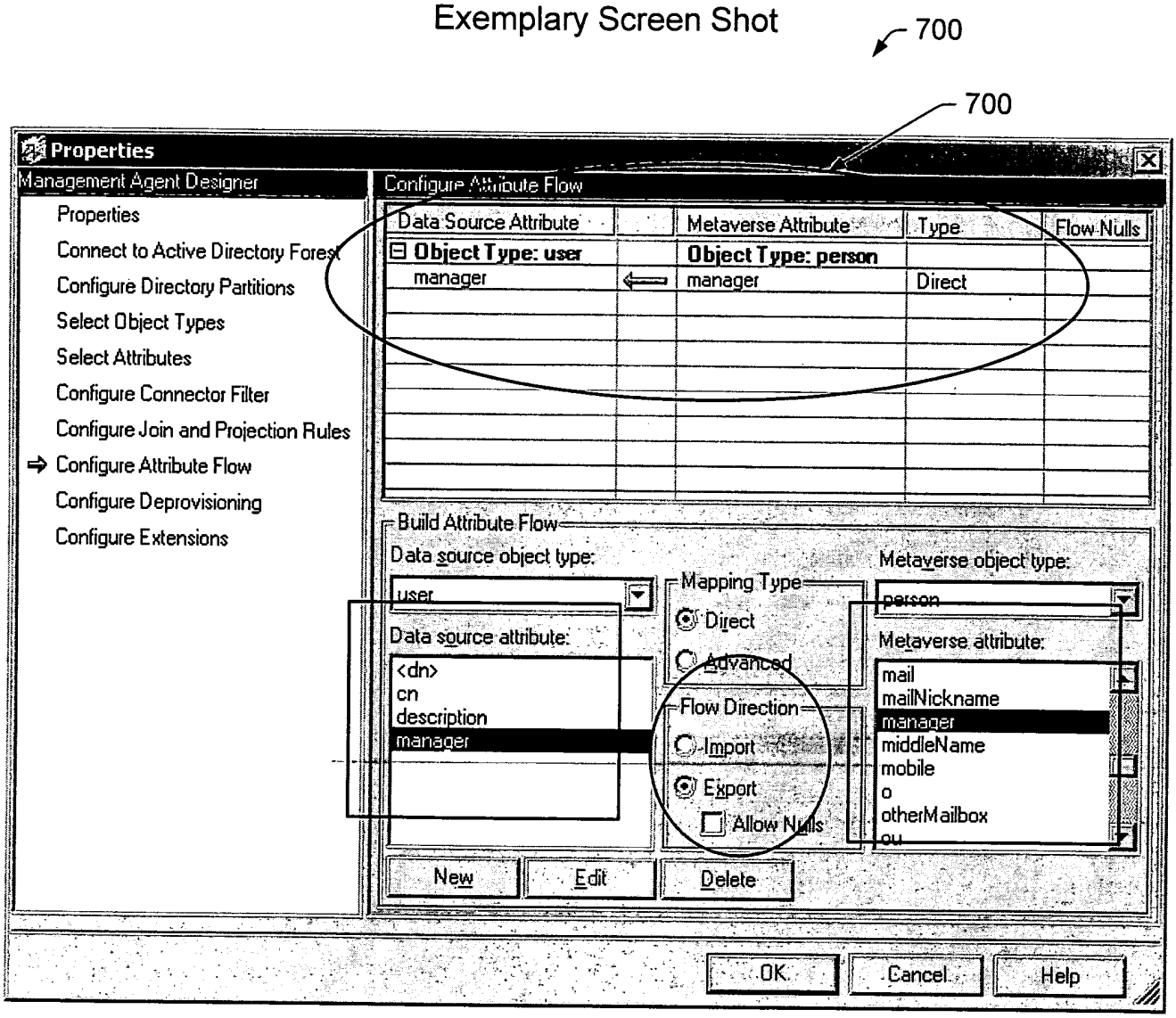

Fig. 7

Exemplary Method

800

```
<import-attribute-flow>                                          810
  <import-flow-set mv-object-type="person">                      812
    <import-flows mv-attribute="manager" type="ranked">          814
      <import-flow src-ma="{CAD5606B-04F5-4B7C-84F3-12B331344893}"
                   cd-object-type="user"                         816
                   id="{F191E3D2-880F-4075-BF6C-9FF00D29AF4C}">  820
        <direct-mapping>
          <src-attribute>manager</src-attribute>                 818
        </direct-mapping>
      </import-flow>
    </import-flows>
  </import-flow-set>
</import-attribute-flow>
```

Fig. 8

Exemplary Method

900

910

```
<export-attribute-flow>
```

912

```
  <export-flow-set cd-object-type="user"
```

914

```
                   mv-object-type="person">
```

916

```
    <export-flow cd-attribute="manager"
                 id="{D4688F56-C30E-4F26-AFA5-9EF6FCBBD58C}"
                 suppress-deletions="true">
      <direct-mapping>
```

918

```
        <src-attribute>manager</src-attribute>
      </direct-mapping>
    </export-flow>
  </export-flow-set>
</export-attribute-flow>
```

Fig. 9

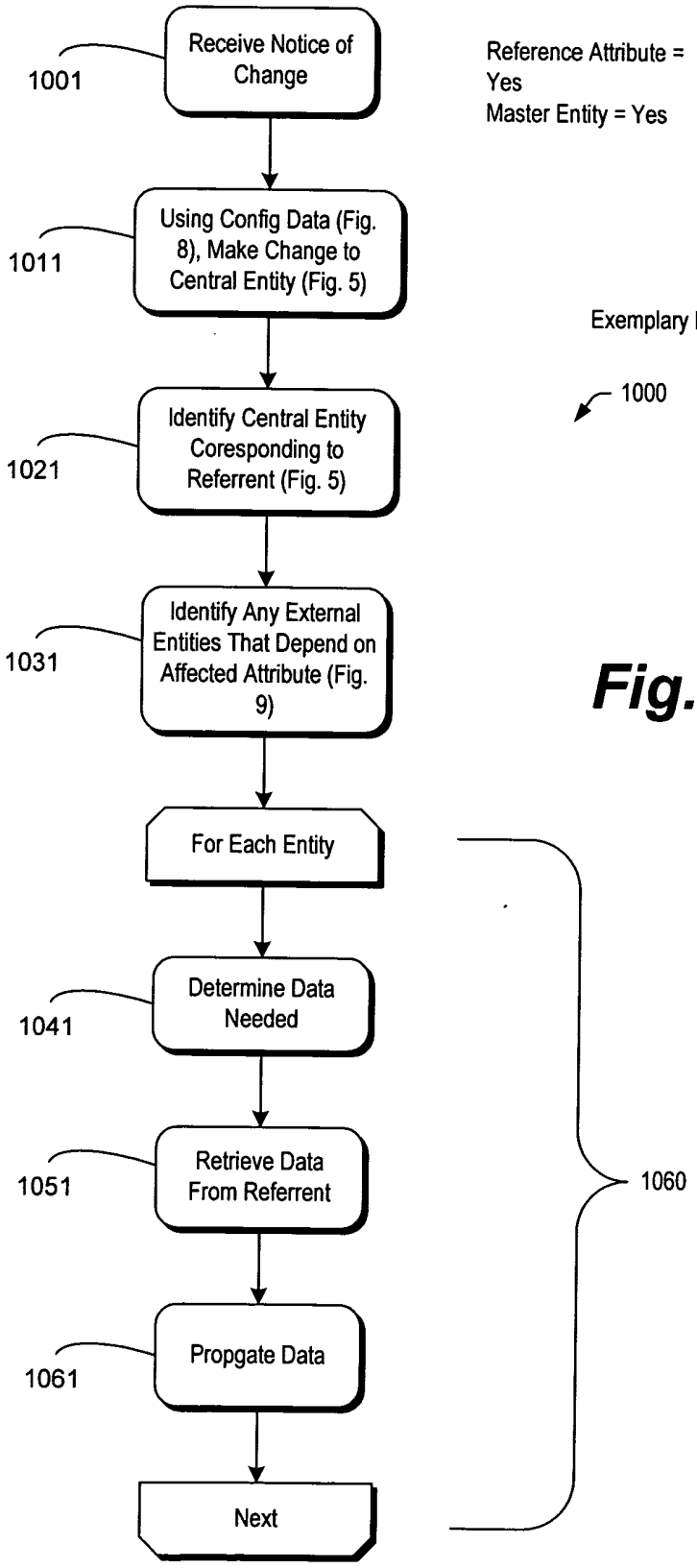
Receive Notice of Change
1001
Reference Attribute = Yes
Master Entity = Yes
Using Config Data (Fig. 8), Make Change to Central Entity (Fig. 5)
1011
Exemplary Method
1000
Identify Central Entity Coresponding to Referrent (Fig. 5)
1021
Identify Any External Entities That Depend on Affected Attribute (Fig. 9)
1031
For Each Entity
Determine Data Needed
1041
Retrieve Data From Referrent
1051
Propgate Data
1061
Next
1060

Fig. 10

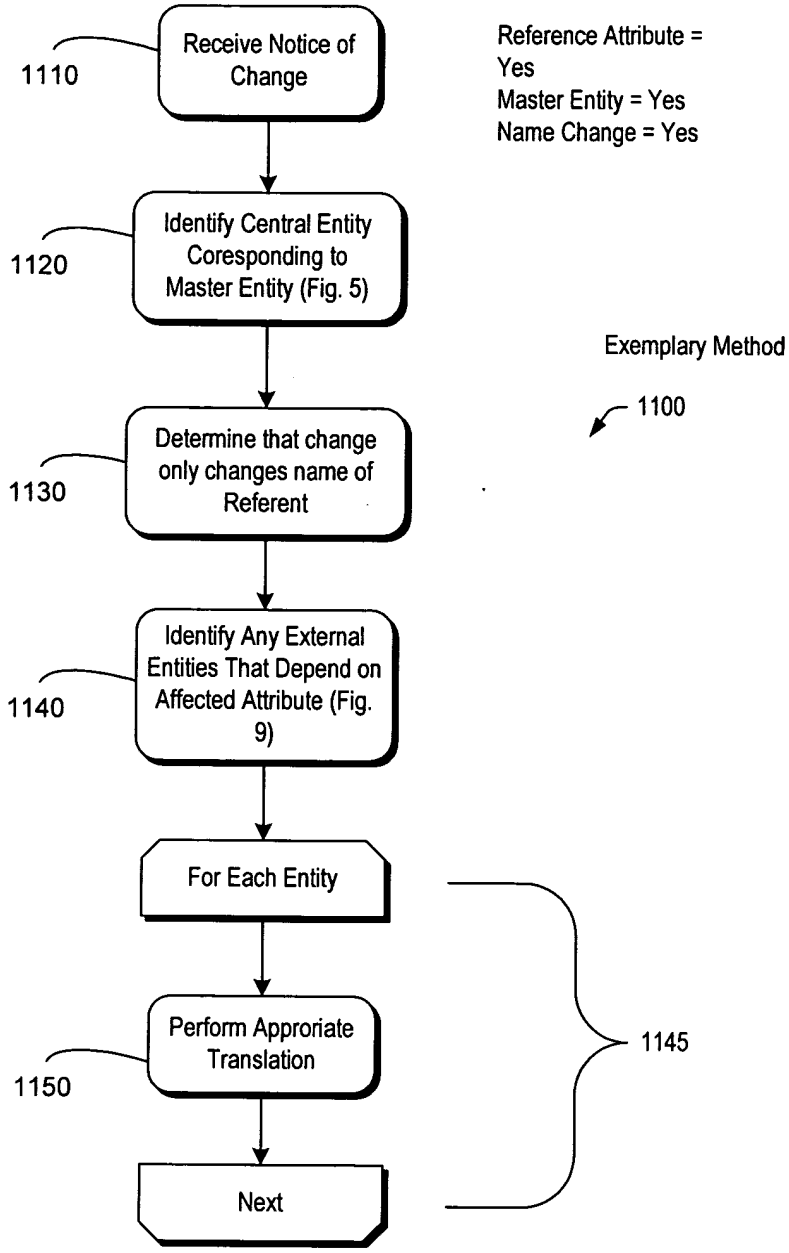
Receive Notice of Change
1110
Reference Attribute = Yes
Master Entity = Yes
Name Change = Yes
Identify Central Entity Coresponding to Master Entity (Fig. 5)
1120
Exemplary Method
1100
Determine that change only changes name of Referent
1130
Identify Any External Entities That Depend on Affected Attribute (Fig. 9)
1140
For Each Entity
Perform Approriate Translation
1150
Next
1145

Fig. 11

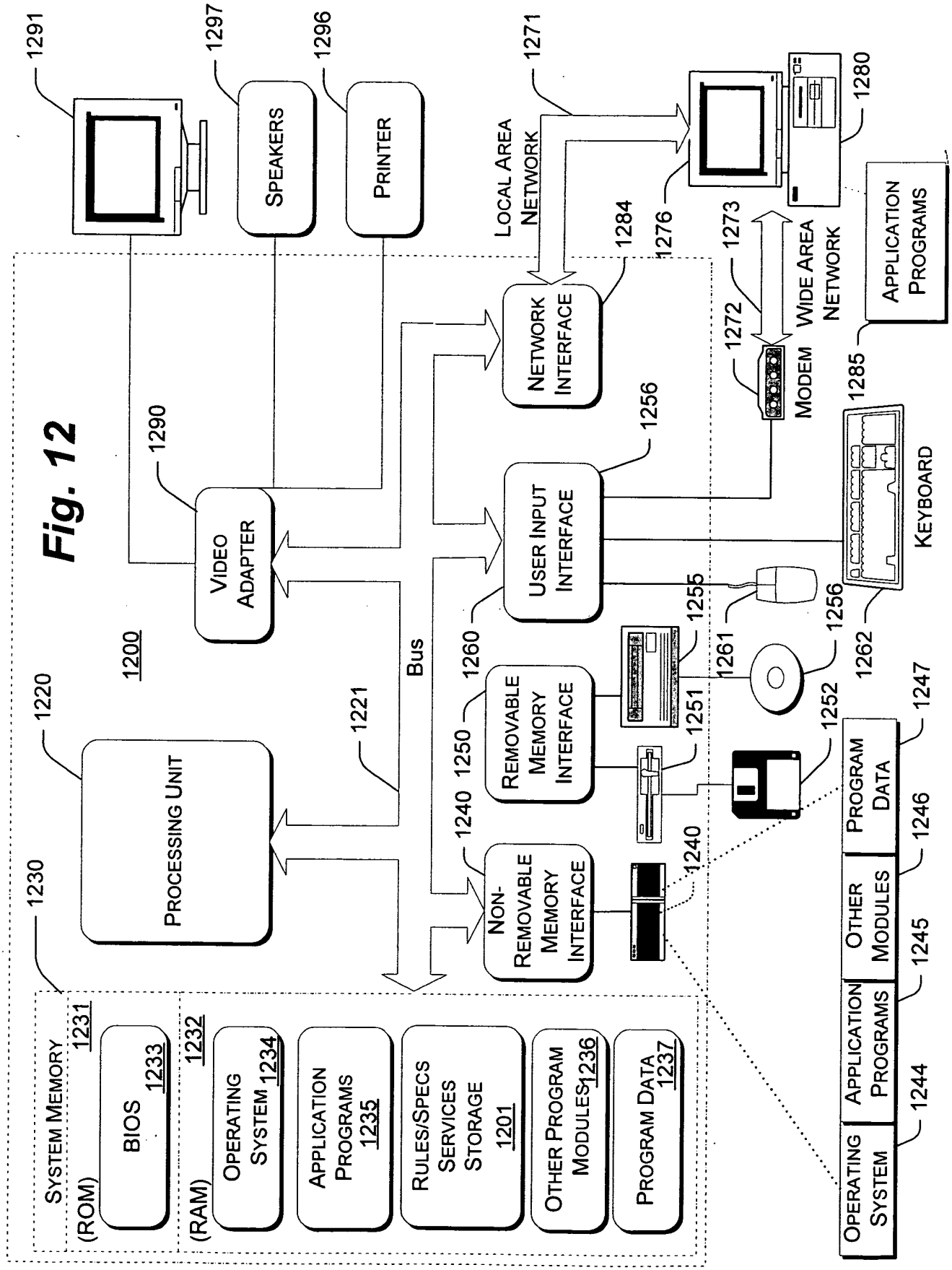
1291
1297
1296
1271
1280
SPEAKERS
PRINTER
LOCAL AREA NETWORK
APPLICATION PROGRAMS
1284
1276
1273
WIDE AREA NETWORK
NETWORK INTERFACE
1272
MODEM
1285
1290
1256
VIDEO ADAPTER
USER INPUT INTERFACE
KEYBOARD
1200
1255
1256
1260
1261
1262
1220
1221
Bus
REMOVABLE MEMORY INTERFACE
1251
1252
1247
1250
1240
PROCESSING UNIT
PROGRAM DATA
1246
1240
NON-REMOVABLE MEMORY INTERFACE
OTHER MODULES
1245
1230
APPLICATION PROGRAMS
1244
OPERATING SYSTEM
SYSTEM MEMORY
1231
(ROM)
BIOS 1233
1232
(RAM)
OPERATING SYSTEM 1234
APPLICATION PROGRAMS 1235
RULES/SPECS SERVICES STORAGE 1201
OTHER PROGRAM MODULES 1236
PROGRAM DATA 1237

Fig. 12